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From: "Robert Law"
Sent: Tue 12/18/2012 2:51:46 PM
Subject: Daily Report - HV CWCM Sampling December 17, 2012

This email provides an update of activities conducted on Monday December 17, 2012 to support the first high volume chemical water column monitoring sampling event.

Three sampling boats were operating on Monday.

The Willing II and Echo Echo sampled at RM 10.2. The RM 10.2 boats were underway from the CPG dock at 08:00, and were off water by 16:45.

The MustDu sampled above Dundee Dam. The vessel above Dundee Dam was underway at 06:45 from the ramp at Dundee Lake and returned at 16:50.

Sample Volumes

The projected sample volumes were based on minimum SSC concentrations from the Small Volume Events Routine #1 through 4 and the Low Flow Event.

At Dundee Dam, the minimum historic SSC was 2.6 mg/L. The projected target sample volume of 800L was calculated using these data.

At RM 10.2, the minimum historic SSC was 3.7 mg/L. The projected target sample volume of 550L was calculated using these data.

During sampling, solids were found to be a higher concentration than anticipated, likely due to overnight rain which caused an increase in flow from 360 cfs to almost 600 cfs within approximately 12 hours.

0.7 um flat filters were being changed at a fast rate (2 to 10 L between changes).

The target sample volumes were revised to:

Dundee Dam - 300L

RM 10.2 - 100L

Flow rates on the carboys were adjusted accordingly to ensure consistent collection.

Samples

The 10L post-PUF filtrate composite samples collected at RM 10.2 were collected at an uneven rate due to modifications in target volume and were collected at the follow intervals:

20L, 34L, 42L, 50L, 58L, 66L, 74L, 82L, 90L and 98L.

Samples were collected for Particle Size Distribution at both locations.

Two nonconformances were noted during sampling on both vessels.

The SOP (SW-19) states that filter changes will occur when pressure reads 5 psi due to the presence of algal material noted during the HV demonstration. Since adding the glass wool pre-filter, which catches the algal matter, the Gravity technicians discussed with AECOM that the trigger for the filter change could be up to 15 psi. Samples were collected following the 15 psi rule.

The stir plates used to homogenize the whole water in the carboys for SSC, POC and DOC were not working with the new carboys purchased for the program due to concave bottoms on the carboys. The carboys were swirled periodically during filling and were continuously agitated while samples were being

drawn. No solid accumulation was noted in the bottom of the carboy.

QC Samples

No internal QC samples were collected Monday.

EPA Oversight

Oversight staff from CDM-Smith (Jeff Rakowski) was on the Echo Echo river conducting visual oversight and collecting an EPA split at RM 10.2. CDM-Smith did not collect a split of the 10L post-PUF filtrate sample.

Other Activities

A Health and Safety briefing was held on each vessel prior to leaving the dock. No Health and Safety incidents were noted today.

EPA, Tierra and Oversight Groups were informed that there will be no space available on board the West Cove. Due to the filter changes and clean-hands sampling techniques being employed, four AECOM team members are required to maintain order and quality during sampling in addition to two samplers from Gravity and two staff from OSI. This puts the crew number at the USCG legal capacity for this boat.

Shipping

One cooler containing all POC/DOC and SSC samples collected on Monday for CWCM was packed for shipping in the morning via UPS.

Other samples are being held at the facility in the locked refrigerated walk-in for shipping later in the week.

Planned Activities

The West Cove will be on site at Tidal River 2 (approximate location RM 3; specific location to be determined on Tuesday morning) to collect a sample and CPG field duplicate. The West Cove will depart the Liberty Landing Yacht Club at approximately 08:30.

The Willing II will transit to Robbins Reef Yacht Club, and an equipment blank will be collected at 14:00.

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